CLAIM AMENDMENTS:

Claims 1-29 (cancelled)

30. (currently amended) A leaf for a multi-leaf collimator to delimit a high-energy beam of an irradiation device, in particular for conformation irradiation, wherein the multi-leaf collimator comprises a plurality of mutually opposite leaves which can be brought into a beam path via drives such that a contour of the beam path can be shaped in accordance with a volume to be irradiated, the leaf comprising:

> a beam-absorbing material of appropriate thickness and disposed substantially only in a region which can enter into the path of the high-energy beam in all possible adjustment positions of the leaf, wherein the leaf comprises an other region which does not absorb the beam, said other region consisting essentially of an other material having a lower atomic number than said beam-absorbing material and also having good mechanical properties.

31. (cancelled)

- 32. (previously presented) The leaf of claim 30, wherein said beamabsorbing material is tungsten.
- 33. (currently amended) The leaf of claim 31 claim 30, wherein said other material is steel.
- 34. (currently amended) The leaf of claim 31claim 30, wherein said beam-absorbing material is joined to said other material such that,

in a front position of the leaf, said other material is still slightly outside of an outermost possible delimitation of the high-energy beam.

- 35. (currently amended) The leaf of claim 31claim 30, wherein said beam-absorbing material is joined to said other material, thereby forming angles.
- 36. (currently amended) The leaf of claim 31claim 30, wherein said beam-absorbing material is introduced into a recess in said other material such that said beam-absorbing material is surrounded by said other material at three sides.
- 37. (previously presented) The leaf of claim 36, wherein the leaf consists essentially of a rear part of said other material and a front part of said beam-absorbing material and further comprising a first narrow elongated part joined at a top of the leaf and a second narrow elongated part joined at a bottom of the leaf, wherein said first and said second parts constitute a guiding part and a driving part.
- 38. (previously presented) The leaf of claim 37, wherein said first and said second narrow elongated parts consist essentially of said other material.
- 39. (currently amended) The leaf of claim 31claim 30, wherein said beam-absorbing material and said other material are soldered together.
- 40. (previously presented) The leaf of claim 39, wherein the leaf is produced through separation from a block which is designed like the leaf, but has a multiple width thereof.

- 41. (currently amended) The leaf of claim 31 claim 30, wherein said beam-absorbing material and said other material are glued together.
- 42. (previously presented) The leaf of claim 37, wherein said first and second narrow parts are joined to said front and rear parts through tongue and groove joints.
- 43. (currently amended) The leaf of claim 31claim 30, wherein said other material has openings.
- 44. (currently amended) A multi-leaf collimator for delimiting a highenergy beam of an irradiation device, in particular for conformation irradiation, the collimator comprising:

a plurality of mutually opposite leaves which can be brought into a beam path via drives such that a beam contour can be shaped in accordance with a volume to be irradiated, wherein each of said leaves comprises a beam-absorbing material of appropriate thickness only in a region which may enter into a path of the high-energy beam for all possible adjustment positions of the collimator, wherein the leaf comprises an other region which does not absorb the beam, said other region consisting essentially of an other material having a lower atomic number than said beam-absorbing material and also having good mechanical properties.

- 45. (cancelled)
- 46. (currently amended) A device for delimiting a high-energy beam, in particular for conformation irradiation, the device comprising:

a multi-leaf collimator having a plurality of mutually opposite leaves which can be brought into a beam path via drives, such that a contour of the beam can be shaped in accordance with a volume to be irradiated; and a further shielding to delimit a path of the high-energy beam, wherein said leaves each comprise a beam-absorbing material of appropriate thickness only in a region which can enter into the path of the high-energy beam and which is not shielded by said further shielding at all possible adjustment positions of said leaves, wherein each of said leaves comprises an other region which does not absorb the beam, said other region consisting essentially of an other material having a lower atomic number than said beam-absorbing material and also having good mechanical properties.

- 47. (previously presented) The device of claim 46, wherein said further shielding is disposed in front of said multi-leaf collimator.
- 48. (previously presented) The device of claim 46, wherein said further shielding is disposed behind said multi-leaf collimator.
- 49. (currently amended) The device of claim 46, wherein said further shielding is a shielding collimator having andan adjustable opening.
- 50. (previously presented) The device of claim 49, wherein said shielding collimator comprises two radiation delimiting elements which can be brought into different positions.
- 51. (previously presented) The device of claim 50, wherein said radiation delimiting elements comprise beam-absorbing material of

corresponding thickness only in a region which can enter into a path of the high-energy beam collimator at all possible adjustment positions of said shielding collimator.

- 52. (previously presented) The device of claim 46, wherein dimensions of regions of said leaves are determined by maximum possible mechanical adjustment motions thereof.
- 53. (previously presented) The device of claim 49, wherein dimensions of regions of said leaves are determined by a maximum mechanical opening of said shielding collimator.
- 54. (previously presented) The device of claim 46, wherein dimensions of regions of said leaves are determined on a basis of a possible adjustment motions of said leaves as delimited by control technology.
- 55. (currently amended) The device of claim 46claim 49, wherein dimensions of regions of said leaves are determined by adjustment motions of said shielding collimator as delimited through control technology.
- 56. (cancelled)
- 57. (currently amended) An irradiation device, in particular for conformation irradiation, the device comprising:

means for delimiting a high-energy beam emitted by an irradiation source, said delimiting means having a multi-leaf collimator comprising a plurality of mutually opposite leaves which can be brought into a beam path via drives such that a

contour of the beam path can be shaped in accordance with a volume to be irradiated, said delimiting means also comprising a further shielding for delimiting a path of the high-energy beam, wherein each of said leaves comprises a beam-absorbing material of appropriate thickness only in a region which can enter into a path of the high-energy beam. and which is not shielded by said further shielding for all possible adjustment positions, wherein each of said leaves comprises an other region which does not absorb the beam. said other region consisting essentially of an other material having a lower atomic number than said beam-absorbing material and also having good mechanical properties.

58. (cancelled)